

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

In the Matter of)	
)	
Digital Audio Broadcasting Systems)	MM Docket No. 99-325
And Their Impact on the Terrestrial)	
Radio Broadcast Service)	

To: The Commission

COMMENTS OF INFINITY BROADCASTING CORPORATION

Infinity Broadcasting Corporation (“*Infinity*”), by its attorneys, hereby submits comments in response to the Public Notice¹ issued by the Federal Communications Commission’s Media Bureau (“*FCC*” or “*Commission*”) on April 14, 2004 (the “*Public Notice*”). In the Public Notice, the FCC sought comments on the conclusions and recommendations made in a letter² (the “*Letter*”) submitted by the National Association of Broadcasters (“*NAB*”) regarding a report³ (the “*Report*”) prepared by iBiquity Digital Corporation (“*iBiquity*”) regarding nighttime operation of AM In-Band/On-Channel (“*IBOC*”) digital radio. The Report is the result of an extensive, year long study of potential interference that might be created by AM nighttime IBOC operation. Based on its review of the Report, Infinity believes that the NAB’s recommendations are strongly supported by the Report’s findings.

¹ Public Notice – *Comment Sought on Use of Digital AM Transmissions During Nighttime Hours*, DA 04-1007 (rel. Apr. 14, 2004).

² Letter to Marlene H. Dortch, Secretary, FCC, from Jack N. Goodman, Senior Vice President & General Counsel, NAB (Mar. 5, 2004) (the “*Letter*”).

³ AM Nighttime Compatibility Study Report, *iBiquity Digital Corporation*, MM Docket No. 99-325 (Mar. 5, 2004).

Infinity believes that IBOC technology promises to reinvigorate the AM service, which continues to face enhanced competition from other technologies and services, such as satellite digital radio, cable-delivered radio, CDs and MP3s. Several of Infinity's stations are already broadcasting in a hybrid IBOC digital audio broadcasting ("*DAB*") mode and the results have been extraordinarily encouraging and have served to increase Infinity's high opinion of this technology's great potential. The feedback Infinity has received from its engineers and other station personnel who have experienced improved IBOC service firsthand has been positive. One of Infinity's program directors commented, "now I know what all the excitement is about." Infinity believes that the public will be equally enthusiastic about the greatly enhanced fidelity and services that will derive from an AM IBOC service provided by both daytime and nighttime operation. The Commission should act expediently to encourage AM IBOC service to be made available to the greatest number of potential listeners, and should avoid taking steps that might impede or deter the conversion to digital service.

As the NAB notes in the Letter, AM IBOC will allow an AM broadcaster to provide audio service of near FM-quality within its core service area.⁴ This quality of service represents a dramatic improvement over current AM analog capabilities and will allow for the reintroduction of music-based formats in the AM service band.

Since the release of the Commission's interim order in this matter in which daytime-only service was authorized for AM IBOC, deployment of AM DAB systems has been restrained. According to iBiquity, only thirty-one AM stations are "on-air" broadcasting in hybrid IBOC DAB, as compared to eighty FM stations providing hybrid IBOC DAB service. The success of reinvigorating AM radio may be greatly compromised if this improved service is not available

⁴ Letter at 1.

both during the daytime, and at night.

The AM service, even more than the FM service, will benefit from the vast technical improvements offered by IBOC DAB. For many years, AM broadcasters and their listeners have had to tolerate the poorer signal quality and fidelity that is inherent to AM broadcasting. For decades, AM broadcasters have competed with technically superior FM stations by offering innovative and compelling entertainment and informational programming, particularly sports and other talk formats, but the success of AM has been made increasingly more difficult in recent years due to satellite digital radio, cable-delivered radio, and MP3s.⁵

In order to encourage broadcasters and the public to embrace AM IBOC technology, Infinity strongly supports the NAB's recommendation that nighttime IBOC broadcast service be authorized for all AM stations currently authorized for nighttime broadcasts. Consumers that grow accustomed to high quality AM IBOC daytime service might be unwilling to accept lesser quality audio service from AM stations if they are forced to revert to transmitting analog signals at night. The inability to maintain a consistent quality of service will prevent AM IBOC radio service from fulfilling its complete potential, and it will likely deter some AM broadcasters from converting to digital audio broadcast service at all.

The FCC should authorize nighttime AM IBOC service on a blanket basis for all currently authorized digital AM stations, rather than requiring each individual AM broadcaster to obtain separate nighttime IBOC authorization. Such a piecemeal approach would only further delay the conversion to improved DAB.

The Report notes that some limited interference may be created by nighttime AM IBOC

⁵ XM Satellite Radio on June 14, 2004 announced that its subscriber base has reached two million, and the company forecasts it will reach 20 million subscribers by 2010. *See USAToday* Internet article, http://www.usatoday.com/money/media/2004-06-14-xm-radio_x.htm.

service. However, as the NAB has stated, the FCC already has the necessary existing authority to address any such unexpected interference on a case-by-case basis. As a result, concerns regarding such interference should be minimal.

Moreover, the most recent tests of nighttime AM IBOC service found that, in most circumstances, any interference that would likely occur to existing groundwave analog broadcasts will be at the outer edges of a station's coverage. As a result, an AM station's core listenership is less likely to be impacted during nighttime IBOC operation, but instead will benefit from greatly improved audio service.

As the Letter further indicates, iBiquity's field tests examined the impact of groundwave and skywave IBOC on both groundwave and skywave analog broadcasts using two Class A stations. These tests found that the IBOC skywave had only a limited impact on analog groundwave service, and even this low level of interference was on the fringe of coverage, well outside the NIF contour. Minimal impact was also seen from groundwave IBOC interference on analog skywave service. The Report found that the most likely interference would be IBOC skywave service impacting distant analog skywave service. As the NAB noted, although the Report found some reduction in the availability of distant skywave service, this service was not eliminated. Infinity agrees with the NAB's conclusion that this is a small price to pay in order to foster the implementation of this important digital technology. The potential benefit of reenergizing local AM service and attracting significant numbers of new listeners greatly outweighs any concerns over potential reduction in distant skywave service.

In assessing the impact of potential interference, the Report assumed a worst-case scenario under conditions in which all stations in North America have converted to digital broadcasting – an assumption that is many years from becoming a reality. Therefore, although

the results of the study do indicate the possibility of minimal interference, the significance of this potential interference should not be exaggerated. Further, as the Letter reports, in most instances the limiting factor for AM nighttime coverage is existing levels of analog co-channel interference. For those stations, any IBOC interference levels are less than the co-channel analog interference; therefore, the IBOC broadcast is masked.

Based on this analysis, Infinity respectfully submits that the vast benefits and improved public service that listeners will receive from nighttime IBOC service greatly outweighs any minimal interference that might occur to AM analog signals. Infinity strongly urges the Commission to recognize this and not to allow any related concerns deter or impede AM conversion to nighttime IBOC authorization.

Infinity recognizes the great potential offered by DAB, particularly in regard to the opportunity to revitalize the AM service, which historically has been intensely responsive to the needs and interests of the public. Nighttime IBOC service is a necessary component in this revitalization, and Infinity strongly urges the Commission to quickly authorize such service without unnecessary licensing burdens. The Commission should recognize that burdensome constraints will not only delay implementation of this superior service, but will likely discourage some broadcasters from even considering expending the financial resources necessary to accomplish conversion to IBOC broadcasting. AM radio broadcasters stand poised to bring new life and energy to an audio service that has seemingly been left behind because of its inherent technological shortcomings. The Commission should recognize the significant public interest in quickly and efficiently bringing this conversion to fruition by authorizing both daytime and nighttime AM IBOC broadcasting for fulltime AM stations.

Respectfully submitted,

**INFINITY BROADCASTING
CORPORATION**

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